BOROUGH OF GRAVESEND

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1948

H. S. DAVIES,

M.D., B.S. (LOND.) M.R.C.S., D.P.H.

HEALTH, MATERNITY AND CHILD WELFARE COMMITTEE, 1948.

The Mayor (Councillor E. E. Osborne, J.P., C.C.).

Councillor W. A. Wyatt (Chairman).

Councillor Miss A. E. H. Johnson, B.E.M. (Vice-Chairman).

Alderman H. A. Hodge.

Alderman H. Robson.

Alderman A. G. Ramsay.

Councillor Mrs. E. M. T. McKenzie.

Councillor J. Cavey.

Councillor J. Taylor.

Councillor R. H. Goodwin.

Councillor C. A. White.

Councillor D. A. Ford.

Co-opted Members for Maternity and Child Welfare :—

Mrs. E. Croft, J.P.

Mrs. I. Wilks.

Mrs. G. E. Life.

Mrs. D. E. Pratt.

HEALTH DEPARTMENT STAFF.

To July 5th, 1948—

HERBERT S. DAVIES, M.D., B.S.(Lond.), M.R.C.S., L.R.C.P., D.P.H.,
Medical Officer of Health.

DANIEL DESMOND, M.B., B.Ch., D.P.H.(Cork),
Deputy Medical Officer of Health.

N. K. THORN, L.D.S., Dental Surgeon.

J. E. BAKER, M.S.I.A., C.R.S.I., Chief Sanitary Inspector.

District Sanitary Inspectors :

F. H. MILLICAN, M.S.I.A., M.R.San.I.

J. H. LOTT, M.S.I.A., C.R.S.I.

Health Visitors :

MISS M. SKIPPER, S.R.N., S.C.M. (resigned February, 1948).

MISS M. THOMAS, S.R.N., S.C.M.

MISS N. DAVIES, S.R.N., S.C.M. (appointed March, 1948).

MISS N. CARTER, S.R.N., S.C.M. (appointed May, 1948).

MISS M. WHITE, S.R.N., S.C.M. (appointed May, 1948).

Matrons Day Nurseries :

MISS M. RIGDEN—" Daneholme."

MRS. J. LUCKHURST, S.R.N.—" Glendillon."

Clerical Staff :

S. V. TONGE, Chief Clerk.

MISS E. CLINCH, Secretary to Medical Officer.

A. H. BAKER.

MRS. W. M. SANDFORD.

MRS. G. H. FERGUSON.

MISS M. KELLY.

MISS G. PUTTIFER.

MISS H. FOSTER.

MISS P. BLACKMAN.

NOTE.—The Sanitary Inspectors hold Meat and Food Inspection Certificates and Health Visitors hold the Health Visitors' Certificate.

HEALTH DEPARTMENT STAFF.

From July 5th, 1948 :—

HERBERT S. DAVIES, M.D., B.S.(Lond.), M.R.C.S., L.R.C.P., D.P.H.,
Medical Officer of Health.

DANIEL DESMOND, M.B., B.Ch., D.P.H.(Cork),
Deputy Medical Officer of Health.

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District Sanitary Inspectors :

*F. H. MILLICAN, M.S.I.A., M.R.San.I.

*J. H. LOTT, M.S.I.A., C.R.S.I.

B. W. TAYLOR, A.R.S.I. (appointed August, 1948).

D. G. BANKS, A.R.S.I. (appointed October, 1948).

Clerical Staff :

MISS E. CLINCH, Secretary to Medical Officer.

A. H. BAKER.

MRS. W. M. SANDFORD (resigned February, 1949).

MISS G. PUTTIFER.

MISS P. BLACKMAN.

MISS B. DAVIS (appointed April, 1949).

NOTE.—*Hold Meat and Food Inspection Certificate.

Health Department,
3, Woodville Terrace,
Gravesend.

8th December, 1949.

Mr. Mayor, Mr. Chairman, Ladies and Gentlemen,

I have pleasure in submitting to you the Annual Report on the Health and Sanitary circumstances of the Borough for the year ended 31st December, 1948.

I must apologise for its late appearance. There are several factors responsible for this. The year 1948 has been a remarkable one in the history of the Medico-Social Services. An article which has recently appeared in the Medical Press may be of interest and a reprint is enclosed.

In an attempt to bring the Report up to date, brief reference will be made to some important happenings in 1949. These matters will be referred to again in the next Annual Report. The statistical matter, of course, refers only to 1948.

On the 5th July, 1948, the National Health Service Act 1946, came into operation. This had the effect of transferring certain personal health services from your control to the County Council. These were the Ante Natal and Post Natal Clinics and Infant Welfare Clinics conducted at three different centres in the town, the Gynaecological Clinic, Diphtheria Immunisation Clinics and the two Day Nurseries, "Daneholme," and "Glendillon." The Home and Domestic Help Scheme has also gone over to the County. The Borough Isolation Hospital in process of conversion to a modern Maternity Unit was transferred to the South East Metropolitan Regional Hospital Board.

In my various reports to the Committee I have made no secret of my concern in regard to the policy of the Kent County Council who have not seen their way to adopt a scheme of decentralised administration either for the School Health Service or the personal health services under Part 3 of the National Health Service Act 1946. I know that my views in this matter have been fully shared by the Council and every effort has been made to persuade the County Authorities to abandon the principle of remote control and to allow day to day administration to be carried out locally.

Whatever disappointments the Corporation have suffered in the past year, they have good reason to be proud of their stewardship, for there can be no doubt that they have handed over efficient services which have been much appreciated by the local residents.

It cannot be denied that many "minor authorities" are capable of rendering valuable service in the cause of health and it is to be hoped that in the future there will be formed smaller and more suitable units for local health purposes and that local knowledge, interest and initiative will not be lost.

I should like to express my thanks to the Council and especially to the Chairman and all the members of the Health Committee for their interest and enthusiastic support throughout the year.

I wish also to thank my staff for their loyal co-operation, which has helped so much in maintaining the standard of the health services in the Borough.

I am, Mr. Mayor, Mr. Chairman, Ladies and Gentlemen,
Your obedient Servant,
H. S. DAVIES,
Medical Officer of Health.

STATISTICS AND SOCIAL CONDITIONS OF THE BOROUGH. SECTION "A."

Area of the Borough (acres)	4,619
Registrar-General's estimate of the Population	42,890
Number of separate inhabited houses estimated	11,185
Rateable Value	£341,707
Sum represented by a Penny Rate	£1,366

Rates (to 31st March, 1949)—19s. 10d. in the £.

Employment and Unemployment.

The chief industries in the locality are—Paper making, light and marine engineering, cement, electrical equipment. A large number of men are employed in the Merchant Navy, on river craft, and in dock work.

There is a demand for men and women both in skilled and in unskilled work.

Unemployment has remained at a low level, but statistics which apply only to the Borough are not available.

Registered Live Births.

	Males.	*Females.*	*Total.*
Legitimate	407	389	796
Illegitimate	16	18	34
Total live births	423	407	830

Birth Rate per 1,000 population—19.35.

Still Births.

	Males.	*Females.*	*Total.*
Legitimate	5	4	9
Illegitimate	2	—	2
Total still births	7	4	11

Still Birth Rate—i.e., Rate per 1,000 total (live and still) births—13.07.

Registered Deaths (all causes).

Males.	*Females.*	*Total.*
239	222	461

Death Rate per 1,000 population—10.75.
(The previous year it was 10.52).

Deaths from Puerperal Causes.

(Heading 29 and 30 of the Registrar-General's List).

	Deaths.	*Rate per 1,000 Live and Still Births.*
Puerperal and Post Abortive Sepsis	Nil	Nil
Other maternal causes	2	2.37
	2	2.37

The Maternity Mortality Rate for England and Wales is :—
Puerperal infections 0.13, other maternal causes 0.73.

Number of Infant Deaths—under 1 year of age.

	Males.	*Females.*	*Total.*
Legitimate infants	12	10	22
Illegitimate infants	1	—	1
Total ...	13	10	23

Death Rate of Infants under 1 year of age :—

Infant Mortality Rate, *i.e.*, All infants per 1,000 live births	27.71
Legitimate infants per 1,000 legitimate live births	27.63
Illegitimate infants per 1,000 illegitimate live births	29.4

Deaths from Cancer (all ages)	75
Deaths from Measles (all ages)	—
Deaths from Whooping Cough (all ages)	—
Deaths from Diarrhoea (under 2 years)	2

Comparative Birth and Death Rates.

Rates.	*Gravesend.*	*England and Wales.*	148 "*Smaller Towns*," *Population of* 25,000 to 50,000
Birth Rate	19.35	17.9	19.2
Death Rate	10.75	10.8	10.7
Infant Mortality Rate... ...	27.71	34.0	32.0

SECTION "B."

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

Laboratory Facilities.

The County Council provide facilities for pathological examinations at their Laboratories in Maidstone, and this arrangement has proved satisfactory.

The following specimens have been examined and reported on :—

(1)	Sputum—	Examinations for Tubercle Bacilli	51
(2)	Swabs—	Examinations for Diphtheria	217
A.		Examinations for Streptococci	—
(3)	Faeces—	Examinations for Pathogenic Organisms ...	32
		TOTAL ...	300

B.	(1)	Milk—	Bacteriological Examinations	54
	(2)	Water—	Bacteriological Examinations	31
			TOTAL ...	85

Ambulance Services—Non-Infectious Cases.

The service is operated by the St. John Ambulance Brigade. Five ambulances are stationed at Commercial Place. Until the 5th July, 1948, the Borough Council paid the Brigade £800 a year for the street accident service. The Kent County Council are now responsible for this service.

Infectious Cases.

The Infectious Diseases Ambulance provided by the Corporation has now been transferred to the Kent County Council.

Home Nursing.

Until the 5th July, 1948, the Council contributed £100 per annum to the Gravesend and District Nursing Association which is affiliated to the Queen's Institute of Nursing. This voluntary Association has done excellent work. The arrangements are now under the control of the County Council.

Maternity and Child Welfare Clinics.

The administration of the following clinics was transferred to the Kent County Council on the 5th July, 1948:—

(1) Ante-natal Clinics.
(2) Infant Welfare Clinics.
(3) Gynaecological and Birth Control Clinic.
(4) Diphtheria Immunisation Clinic.
(5) Dental Clinic.

Tuberculosis Clinic.

The Tuberculosis and Chest Clinic is held at the Gravesend and North Kent Hospital every Wednesday at 1 p.m. On the 5th July, 1948, the administration passed from the Kent County Council to the South East Metropolitan Regional Hospital Board.

Venereal Diseases Clinic.

Administrative arrangements are now under the control of the South East Metropolitan Regional Hospital Board.

The Gravesend Clinic, at 22, Cobham Street, is held at the following times:—

	Male.	*Female.*
Monday	6.0 p.m. to 7.0 p.m.	9.0 a.m. to 12 noon and 1.0 p.m. to 4.0 p.m.
Tuesday	6.0 p.m. to 7.0 p.m.	1.0 p.m. to 2.0 p.m.
Wednesday	6.0 p.m. to 7.0 p.m.	9.0 a.m. to 12 noon and 1.0 p.m. to 4.0 p.m.
Thursday	3.30 p.m. to 5.30 p.m.	2.0 p.m. to 3.30 p.m.
Friday	6.0 p.m. to 7.0 p.m.	9.0 a.m. to 12 noon and 1.0 p.m. to 4.0 p.m.
Saturday	1.0 p.m. to 2.0 p.m.	9.0 a.m. to 12 noon
	Special Clinic—Medical Officer attends.	
Tuesday	11.0 a.m. to 12.30 p.m.	1.0 p.m. to 2.0 p.m.
Thursday	3.30 p.m. to 6.30 p.m.	2.0 p.m. to 3.30 p.m.

Hospitals.

The Out-patients Clinics of the Hospital are as follows:—

TIME TABLE.

	MONDAY	
11.0 a.m.	Traumatic Clinic	Mr. M. Landau
11.30 a.m.	Ear, Nose and Throat	Mr. C. G. E. Plumstead
2.0 p.m.	Hearing Aids	
	TUESDAY	
9.0 a.m.	Dental Clinic	Mr. A. L. Wraight
9.30 a.m.	Ophthalmic Clinic (School)	Mr. G. L. Simmons
11.30 a.m.	Surgical Out-Patients and Varicose Veins	Mr. K. W. D. Hartley
2.30 p.m.	Ante-Natal	Mr. F. S. Horrocks and
3.0 p.m.	Gynaecological	Mr. A. M. Hunter
	WEDNESDAY	
9.0 a.m. (by appointment)	Chest Clinic	Dr. H. C. Calvey
10 a.m. (by appointment)	C.O.2	Physio-Therapy Dept.
10 a.m. (by appointment)	(Plasters) Fracture Clinic	Mr. M. Landau
1.30 p.m.(by appointment)	Aural Clinic (K.E.C.)	Mr. T. P. Gill
3 p.m. (by appointment with Almoner)	Psychiatric Clinic	Dr. S. W. Hardwick
	THURSDAY	
9.30 a.m.(by appointment)	Orthopaedic Clinic	Mr. V. M. Franklin
9.30 a.m.(by appointment)	Refill Clinic	Dr. H. C. Calvey
9.30 a.m.	Ophthalmic Clinic	Mr. W. E. Heath
12 noon (by appointment)	Electro-Medical	Mr. K. W. D. Hartley
1.30 p.m.	Ophthalmic Clinic (School) (K.E.C.)	Mr. G. L. Simmons
	FRIDAY	
8.30 a.m.	Dental Clinic	Mr. F. T. Wilkinson
11 a.m. (by appointment)	Surgical Clinic	Mr. Sol M. Cohen
11.15 a.m. (by appointment) (New cases 12.15 p.m.)	Fracture Clinic	Mr. M. Landau
1.30 p.m.	Ophthalmic Clinic (School) (K.E.C.)	Mr. M. F. McDonnell
2 p.m. (by appointment with Almoner)	Psychiatric Clinic	Dr. S. W. Hardwick
	SATURDAY	
11 a.m.	Medical Out-Patients	Dr. J. Crawford

DRESSINGS DAILY at 9 a.m.

9.30 a.m. Orthoptic Clinic Daily (except Wednesday)

X-RAYS DAILY from 9 a.m. (by appointment for special examinations).

MATERNITY AND CHILD WELFARE.

Notification of Births.

Under Section 203 of the Public Health Act, 1936, births were required to be notified to the Borough Medical Officer. On the 5th July, 1948, when the National Health Service Act came into operation, notifications were sent direct to the Medical Officer of the Kent County Council.

The number of live and still births occurring in Gravesend during the year was 946. After correction for those whose usual residence is elsewhere, the number properly belonging to the Borough was 841, compared with 1,069 in the previous year (830 live births and 11 still births).

Of the 841 live and still births occurring in Gravesend, 330 were born in institutions; this represents 39%. In addition 199 non-residents were confined in Gravesend institutions.

Of the 330 infants born in institutions, 235 were born in Hospital and 95 in Nursing Homes.

Area Distribution of Births.

Details in regard to area distribution of births, health visiting, etc., are not now available.

Premature Infants.

Until the date of handing over the services to the County Council, the recommendations of the Ministry of Health—circular 20/44 were implemented as far as possible. The procedure is set out in my last Annual Report and the Council have supplied the following special equipment to be available for loan at all times :—

Draught-proof cot with detachable lining, suitable warm clothing, hot water bottles, special feeding bottles, thermometer, mucus catheter, baby scales, etc.

Premature Births.

Statistical summary for the period 1st January to 5th July, 1948.

(1)	Total number who were born		17
	(a) at home ...	9	
	(b) in hospital ...	5	
	(c) nursing home ...	3	
(2)	The number of those born at home :—		
	(a) who were nursed entirely at home		8
	(b) who died during the first 24 hours		1
	(c) who survived at the end of 1 month		8
(3)	The number of those born in Hospital :—		
	(a) who died during the first 24 hours		1
	(b) who survived at the end of 1 month		4
(4)	The number of those born in Nursing Homes :—		
	(a) who died during the first 24 hours		Nil
	(b) who survived at the end of 1 month		3

The figures for the second half of the year are not available.

Child Life Protection.

All arrangements are now under the control of the Kent County Council.

Day Nurseries.

The Day Nurseries remained under the control of the Corporation until the 5th July, 1948, when they were transferred to the County Council. The following statistics refer to the first half of the year.

	Date of Opening.	*No. of Places Provided.*	*Average No. on the Register.*	*Daily average Attendances.*
" Daneholme," Pelham Road	January, 1942	36	39	29
" Glendillon," Old Road East	April, 1942	34	37	25

Staffing Arrangements.

Each Nursery has a Matron in charge, a Deputy Matron, three Nursery Nurses and five students. A Nursery teacher was employed at " Glendillon " but it was not possible to fill the vacancy at " Daneholme."

Both Nurseries are affiliated to the National Society of Children's Nurseries and are training schools for students.

General Considerations.

Although originally designed by the Government to enable mothers to enter industry, there can be no doubt that quite apart from this point the children at the Day Nurseries derive great benefit therefrom. This becomes very evident to anyone visiting the Nurseries regularly. The children live healthy lives and develop excellent habits. Of even greater advantage is their improved social behaviour. They learn to adapt themselves to other children and to the community in a very remarkable way. They develop more fully and earlier than children who are denied the advantage of skilled teaching and community play. Teachers from the Infant Departments have remarked on the difference between children who come to them after attending Day Nurseries compared with those who have not previously left their homes.

" Home Helps " and " Domestic Helps " Scheme.

This scheme was taken over by the Kent County Council on the 5th July, 1948. The following figures relate to the period 1st January to 5th July, 1948.

No. of Home Help Cases (full-time for 14 days or over)	5
No. of Home Help Cases (full-time for less than 14 days)	22
No. of Home Help Cases (less than 8 hours per day)	1
No. of Domestic Help Cases (full-time for a period)	12
No. of Domestic Help Cases (few hours a day)	93

Maternity and Child Welfare Centres.

The three Welfare Centres in the Borough are Windmill Street (Central), Whitehill (King's Farm Estate), and "The Nest" (Denton and Chalk district). The services were transferred to the County Council on 5th July, 1948. The sessions are as follows :—

	Windmill Street	*Whitehill*	*"The Nest"*
	Afternoon.	*Morning.*	*Afternoon.*
MONDAY	Child Welfare ; Health Visitors Consultations; Baby weighing ; Sale of Foods, etc.	Ante-Natal Clinic.	Ante-Natal Clinic.
	Afternoon		
TUESDAY	Child Welfare Clinic with Medical Officer in attendance.	—	—
			Afternoon
WEDNESDAY	—	—	Child Welfare Clinic with Medical Officer in attendance. Sale of Foods, etc.
	Afternood	*Afternoon*	
THURSDAY	Ante-Natal Clinic	Child Welfare Clinic with Medical Officer in attendance. Sale of Foods, etc.	—
	Afternoon		
FRIDAY	Child Welfare ; Health Visitors Consultations; Baby weighing ; Sale of Foods, etc.	—	—

Attendances at Child Welfare Centres.

The attendances at the three Welfare Centres during the year were :—

(a)	Individual children under 1 year of age	943
(b)	Individual children between 1 and 5 years	853
(c)	Total number of attendances of all children under 5	18,752

For the year 1947 the figures were :—

(a) 978 (b) 1,894 (c) 18,707

The receipts for milk foods, etc., for the period 1st January to 5th July, 1948, amounted to £1,337.

Ladies' Voluntary Committee.

Since the National Health Service Act came into operation, it has been realised that the need for voluntary effort is as great as ever before. In this connection reference must be made to the excellent work which has been and still is being done by the Ladies' Voluntary Committee. They are continuing to assist at the three Welfare Centres under the Kent County Council. The Ladies make a valuable contribution to the success of the centres, and their work is greatly appreciated by the staff and mothers alike.

Ante Natal Clinics.

The Ante-natal clinic is held every week at each of the three centres in the town.

A Woman Medical Officer has been appointed to conduct the central clinic at Windmill Street.

In all 419 expectant mothers attended the clinics. The total attendances were 1,027, as against 723 in the previous year.

Gynaecological Clinic.

This clinic, which is conducted by Dr. L. Hemmant, has been functioning for a number of years. It provides advice to married women suffering from gynaecological conditions, or from any form of sickness likely to render pregnancy detrimental to health.

The following is a summary of the year's work :—

Number of Sessions	... ...	11
Total attendances	... ...	271
New Cases :—		
Minor Gynaecological disorders	...	19
Advice on contraception	... ...	64
	TOTAL	83

Dental Treatment.

The Corporation's Dental Clinic in Manor Road was taken over by the Kent County Council under the Education Act, 1944. Arrangements were made by this Authority for Expectant and Nursing Mothers and children under five years to receive treatment until the 5th July, 1948.

The following is a summary of the work from 1st January to the 5th July, 1948 :—

No. of Mothers inspected	...	...	...	...	47
No. of Mothers referred for treatment	...	...	...	...	47
No. of Pre-school children referred for treatment	...	...	...	...	25

Treatment—(Mothers).

Extractions	... ...	224	No of Gas Cases	... ...	42
Fillings	... ...	48	Other Operations	... ...	57
Dentures supplied	...	36			
Total number of attendances		320	Cash Receipts	...	£58 os. 6d.

Treatment—(Pre-school children.)

Extractions	72	No. of Gas Cases	18
Fillings	8	Other Operations	6
Total number of attendances for treatment			45

Ophthalmic Treatment.

Prior to the 5th July, 1948, pre-school children requiring Ophthalmic Treatment were referred to the Ophthalmic Surgeon, at the Ophthalmic Clinic, Gravesend and North Kent Hospital.

The number of children under five who were referred for treatment before the 5th July, 1948, was 4.

Orthopaedic Treatment.

Prior to the 5th July, 1948, children under five years of age requiring Orthopaedic Treatment were referred to Mr. J. S. Batchelor, F.R.C.S., the Orthopaedic Specialist at Gravesend and North Kent Hospital. Arrangements were made for hospital accommodation and after-care.

During the period 1st January to the 5th July, 1948, two children were referred to the Orthopaedic Specialist by the Medical Officer.

Surgical appliances were provided for one child.

Minor Ailments Clinics—School Children.

These clinics have been taken over by the Kent County Council under the Education Act, 1944. They are held daily at 9 a.m. at Windmill Street Clinic, and on Tuesdays and Fridays at 10.30 a.m. at " The Nest," Denton. A Medical Officer is in attendance.

Domiciliary Midwifery Service.

The Kent County Council are the Local Supervising Authorities under the Midwives Acts, 1902 to 1936. They employ six midwives in the Gravesend Area.

The particulars given last year of the number of births in the district delivered by Midwives and attended by Medical Practitioners, are not now available.

Abnormal Maternity Patients.

Abnormal maternity cases are admitted to the Gravesend and North Kent Hospital under the arrangements made by the Corporation.

Twenty-two women were treated during the period 1st January to the 5th July, 1948. The figures for the second half of the year are not available.

Maternal Deaths.

Two deaths occurred from abnormalities in childbirth. One birth took place at home and one in the Hospital. The deaths were certified as follows :—

1. (a) Congestive Heart Failure.
   (b) Chronic Nephritis.
   (c) Toxaemia of Pregnancy.
2. Post Partum haemorrhage, and shock due to retained products.

Moral Welfare—Care of the Unmarried Mother and Her Child.

During the six months, 1st January to 5th July, 1948, eight expectant mothers were referred to Kendal House, Pelham Road. This home, which is under the charge of an experienced Church Army Sister, was opened in 1946 by the Rochester Diocesan Council for Moral Welfare.

The Borough Council have taken a great interest in this important work and have made substantial financial contributions to the Gravesend Branch of the Rochester Diocesan Association for Moral Welfare. Although this work now comes under the administration of the Kent County Council, the Gravesend Corporation continue to keep in touch with this valuable work.

Old People's Welfare Committee.

During the past year increasing attention has been given to the welfare of old people, and an " Old People's Welfare Committee " has now been formed in Gravesend which is affiliated to the Kent Council of Social Service. The object of the Committee is to promote and assist the general good of all old people in the Borough. One of the results was the opening on Friday, 9th September, 1949, of a " Darby and Joan Club." This club will meet every Friday afternoon at St. Faith's Hall and will have a tremendous effect on the health and happiness of the old people of the town.

Borough Maternity Home.

In my report last year I referred to the disappointment which had been felt that the scheme for the conversion of the Borough Infectious Diseases Hospital for the purpose of a modern Maternity Home had not been implemented.

The Borough Council have taken great pains over a number of years in working out details for planning, equipment and staffing arrangements, and they have put in hand a considerable amount of work in the adaptation of the buildings.

The premises in process of conversion were handed over to the South East Metropolitan Regional Hospital Board on the 5th July, 1948, and this body are now responsible. But the Council have continued to press forward for the completion of the scheme. The present position is as follows :—

At a meeting held at the Town Hall, Gravesend, on the 17th June, 1949, between representatives of the South East Metropolitan Regional Hospital Board, the Gravesend Borough Council and the Medway and Gravesend Hospital Management Committee, the representatives of the Borough Council placed before the meeting their views upon the urgent necessity for opening the premises at Whitehill Lane as a Maternity Home at the earliest possible date. The need for this Maternity Home in the Borough was strongly emphasized and it was stated that the Council would deprecate any suggestion that the premises should be used for any alternative purpose or that any undue delay should occur in opening the premises as a Maternity Home. The Council's representatives stated that the burgesses of the Borough quite rightly expected the early opening of the Maternity Home and would be more than disappointed if the plan did not materialise.

The representatives of the Regional Hospital Board stated that the proposal to open the premises in part as a Maternity Home had never been abandoned and that the delay in proceeding with the scheme was due in the first instance to the necessity for planning the accommodation needed in their area as a whole, and lately to the financial stringency. They stated that they hoped to be able to proceed in

the near future with the opening of one part of the premises which would provide 14 beds for the use of maternity cases. This, of course, was dependent on the completion of the administrative block to which much had to be done. The representatives of the Board stated that no decision had yet been reached upon the use to which the other part of the premises would be put, but that if it was impracticable to use this part for maternity cases consideration would be given to using it for hospital cases during the post-operative period.

Kent County Council's arrangements for District Medical Officers of Health.

The Borough Council have recently considered the proposed arrangements of the County Council under Section 111 of the Local Government Act, 1933, for securing whether by means of a combination of districts or otherwise, that every medical officer of health subsequently appointed for a county district shall be restricted by the terms of his appointment from engaging in private practice as a medical practitioner.

These arrangements provide that Gravesend should combine with Northfleet and Swanscombe Urban District Councils and the Strood Rural District Council for the purpose of appointing any future Medical Officer of Health and that such Medical Officer of Health should not carry out any duties for the County Council.

The Corporation have approved these arrangements in principle provided that the County Council would agree to set up an Area Sub-Committee of the County Health Committee for the areas of these authorities and that such Medical Officer of Health be also appointed Area Medical Officer of the County Council.

Exchange of Statistics with County Council.

Under Section 113 of the Local Government Act, 1933, a District Medical Officer has the duty of supplying information required by the County Medical Officer for the purpose of his duties, and full information has been supplied to the County. There has been difficulty in regard to obtaining certain information from the County Council. The County Medical Officer has generously stated that he would like to supply such information but the motion recently submitted to the Health Committee that statistics relating to the health services should be supplied to the District Councils, has been defeated. In the circumstances, therefore, he was unable to supply the information.

It is laid down in the Sanitary Officers (Outside London) Regulations, 1935, that a Medical Officer of Health shall inform himself as far as practicable respecting all matters affecting or likely to affect the public health in the district, and be prepared to advise the Local Authority on any such matter. It is to be hoped, therefore, that the County Council will be able to see their way to assist us as far as possible in the supply of full information in regard to the Health Services for which the County are responsible.

Borough Boundaries—Local Government (Boundary Commission Act, 1945).

The Assistant Commissioner visited Gravesend for consultation on 5th April, 1949. The case of the Corporation was put before him. The Medical Officer of Health together with the other Chief Officers gave evidence and the Commissioner made certain inspections and collected data for future policy.

It is now known that the Local Government Boundary Commission Act, 1945, is to be repealed ; this will mean winding up the Commission. We may hope that reform so urgently needed may not be long delayed.

Registration and Supervision of Nursing Homes.

Nursing Homes are governed by Section 187-195 of the Public Health Act, 1936.

The main object of the provisions is to prevent, among other things, the owners of nursing homes, which are run for profit, from endangering the health and safety of patients by the use of unsuitable premises, inadequate equipment and unqualified staff.

There are two nursing homes in the Borough. Twelve inspections were made.

(1) Maternity Home—14 beds.

(2) Home for Medical Cases, chiefly old people—10 beds.

Arrangements made for the Discovery of Unregistered Homes.

1. The Birth Notifications were examined to check the addresses at which the births occurred.
2. Health Visitors and the staff are instructed to look out for unregistered homes.
3. Local newspapers are perused for advertisements of unregistered homes.

SANITARY INSPECTION, HOUSING AND FOOD.

Mr. J. E. Baker, Chief Sanitary Inspector, has supplied the statistics relating to Sanitary Inspection, Housing and Food Inspection.

SECTION "C."

SANITARY CIRCUMSTANCES OF THE AREA.

WATER SUPPLY.

Public Drinking Supplies.

Two public water companies supply water to the Borough.
The water has been satisfactory.
(a) in quantity. (b) in quality.
The water in both supplies is hard and there is no evidence of plumbo-solvent action.

Twelve dwelling houses are supplied from public mains by means of stand pipes. The remainder of the Borough is supplied direct to houses. The twelve houses in question are scheduled for demolition procedure when the housing situation permits.

Bacteriological Examination.

Thirty-one samples of water were taken for bacteriological examination as follows :—

	No. of Samples.	*Satisfactory.*	*Unsatisfactory.*
Gravesend & Milton Water Co's supply ...	17	17	—
Higham & Hundred of Hoo Co's supply ...	14	14	—
	31	31	—

Included in the foregoing are seven samples from the following sources :—

(a) **Gravesend & Milton Water Co's Supply.**
1. Untreated water from Istead Rise well.
2. Treated water from outgoing main.
3. Treated water from reservoir.
4. Treated water from outlet well from reservoir.
5. Untreated water from Leith Park Road well.

(b) **Higham & Hundred of Hoo Co's Supply.**
6. Untreated water from well at Cuxton.
7. Treated water from Meter House at Cuxton.

Chemical Analysis.

Samples taken for chemical analysis were as follows :—

	No. of samples.	*Satisfactory.*	*Unsatisfactory.*
Gravesend & Milton Water Co's supply (2 treated and 2 untreated) ...	4	4	—
Higham & Hundred of Hoo Co's supply (1 treated and 1 untreated) ...	2	2	—
	6	6	—

The following are typical examples of reports on each of the Gravesend Company's and the Higham & Hundred of Hoo Company's supplies :—

Description of Sample.	*"Gravesend and Milton Water Co's Supply."*	*Higham and Hundred of Hoo Water Co's Supply."*
Appearance	Clear	Clear
Smell	Normal	Normal
Colour	Green-blue	Green-blue
Chlorine in Chlorides	1.12	1.19
Phosphoric Acid in Phosphates ...	None	None
Nitrogen in Nitrates	0.35	0.39
Ammonia	0.0004	None
Albuminoid Ammonia	0.0006	0.0011
Oxygen absorbed in 15 minutes ...	Trace only	Trace only
Oxygen absorbed in 4 hours	0.008	0.006
Hardness before boiling (total) ...	19.4	18.3
Hardness after boiling (permanent) ...	2.6	2.9
Total solid matter	23.10	23.66
Microscopical examination of deposit ...	(slight and unimportant)	(slight and unimportant)
Free Chlorine	0.05 parts per million	None
Metallic impregnation— (copper, lead, zinc)	None	None

REMARKS : The above results are satisfactory throughout and indicate waters organically pure and free from sewage percolation.
The microscopical examination is also satisfactory.

Corporation Bathing Pool.

The Open-air Bathing Pool opened in 1938, has accommodation for 800 bathers.

The main pool is 150 feet long by 75 feet wide and has two shallow areas and a diving pit. The diving apparatus includes the following diving boards :—1 metre fixed ; 1 metre spring ; 3 metre fixed ; 3 metre spring ; and a 5 metre fixed and a chute.

The 400,000 gallons of water in the pools is filtered, aerated, sterilised and heated.

Wide surrounds and large areas are provided for sun-bathing, whilst a spectator's terrace surrounds the site.

On the first floor of the building a Cafe and Spectors' Gallery is provided, affording a splendid view of the whole site.

There is also a Children's Paddling Pool, 50 feet by 50 feet, with its own surround, separated from the main pool by a terrace.

During the 1948 season the following persons used the Pools :—

Bathers and Spectators	58,630
Schools	16,793
Season Pass	6,580
Clubs	3,107
H.M. Forces	350
	85,460

Bacteriological Examination of Water.

Thirty-three examinations were made. See tabulated summary on pages 45-47.

Hygienic Arrangements.

The Medical Officer of Health has continued to keep the hygienic arrangements at the Pool under supervision. "Breakpoint Chlorination," referred to in last year's report was put into operation at midnight on 17th August, 1948. It appears to be working efficiently and water samples taken during the 1949 season have proved satisfactory.

The total attendance figure for this season, to date, is 114,122.

The Children's Paddling Pool is not being used at present.

Slipper Baths.

The Slipper Baths at the Corporation Bathing Pool have now been completed and they were opened to the public on the 31st January, 1949.

There are separate sections for males and females and originally five baths were allocated to each. It was, however, evident that a greater number of males were taking advantage of this service and in June last, a partition was erected in order to increase the number of baths available for this sex. The new allocation is Males—7 baths ; Females—3 baths.

This service is working very satisfactorily and is much appreciated by the residents of the town. The total attendance to date is 6,144 Males and 2,888 Females.

ADMINISTRATION OF FACTORIES ACT, 1937.

The Council has the duty to enforce certain provisions of Part I and Part VIII of the Factories Act, 1937.

Administrative arrangements include the following :—

Part I—Health (General Provisions).

(1) Registration of all factories.
(2) Inspection of sanitary conveniences in all factories.
(3) Inspection with regard to cleanliness, overcrowding, temperature, ventilation and drainage of floors in all factories in which mechanical power is not used.

Part VIII—Homework.

(1) Examination of lists, supplied to the Council by employers of outworkers in certain specified trades.
(2) Notifications of name and place of employment of any home worker employed outside the Borough to the Council in whose district his employment is situated.
(3) Inspection of premises in which the outworker pursues his occupation.

Two hundred and fifty-one inspections of factories were made during the year 1948, and the provisions of the Act, so far as they affect Local Authorities, have been enforced. The following table shows the work carried out :—

	No. on Register.	*No. of Inspections.*	*No. of Notices for defects.*	*Notices Complied with.*
Factories with Mechanical Power	132	135	42	33
Factories without Mechanical Power ...	68	103	30	25
Basement Bakehouses ...	6	13	7	7
	206	251	79	65

1. Total number of outworkers notified to Gravesend Council 1948 (under 1 (c) of Sect. 110 Factories Act, 1937) 10
2. Total number of outworkers notified by Gravesend Council to other Councils (under 2 of Sect. 110 Factories Act, 1937) 3
3. Total number of outworkers notified to Gravesend by other Councils ... 5
4. Total number of outworkers employed in Gravesend 12
5. Total number of inspections of work places (under 111 (1) Factories Act, 1937) 8
6. List of scheduled occupations followed by outworkers employed in premises in Gravesend :—
   Wearing apparel, making etc. 12

SUMMARY OF INSPECTIONS AND REVISITS.

Dwelling houses inspected	1,780
Re-inspections	4,559
Visits to other premises :—	
Bakehouses	45
Butchers' shops	115
Common lodging houses	4
Cowsheds	17
Dairies and milkshops	66
Dining rooms and cafes	150
Factories (with power)	148
Factories (without power)	103
Fishmongers	152
Fish Frying	30
Greengrocers	258
Gut scraping	6
Ice cream premises	160
Infectious diseases	143
Markets	46
Other food-preparing places	69
Outworkers	8
Piggeries	11
Places of entertainment	8
Provision shops	461
Public Conveniences	39
Public House Conveniences	54
Rats and Mice	4,614
Schools	7
Slaughterhouses	18
Smoke observations	10
Stables	12
Tents, vans, sheds	6
Urinals	10
Miscellaneous	2,089
Total visits of all kinds	15,198

NOTICES SERVED AND COMPLIED WITH.

In respect of dwelling houses :—	
Informal notices	1,166
Statutory notices	79
Notices complied with	1,209
In respect of other premises :—	
Informal notices	275
Notices complied with	233

NUISANCES AND DEFECTS REMEDIED.

Accumulations removed	50
Animals kept as to be a nuisance	7
Dustbins provided	684
Cesspools—repaired	1
covers provided	1
disused and filled in	9
Chimney stacks—repaired	31
new pots provided	9
Coppers—new provided	2
repaired	12
Dampness—damp-proof courses provided	1
damp wallplaster removed and re-instated	314
external walls repaired	83
external walls repointed	94
external walls rendered	54
guttering repaired or renewed	151
hopper heads provided	5
roofs repaired	215
rainwater pipes renewed or repaired	113
sub-floor ventilation provided	6
Door and door sills repaired or renewed	74
Dirty houses cleansed by tenants	8
Drainage—drains repaired	7
drains relaid	38
drains unstopped	66
inspection chambers provided or repaired	25
inspection chamber covers provided	6
soil and ventilation pipes, new provided	3
soil and ventilation pipes, repaired	8
soil and ventilation pipes, removed	6
gullies and/or grids provided	44
gully curbs or channels repaired or provided	44
External woodwork, etc., painted	1
Fireplaces renewed or repaired	43
Floors repaired or relaid	114
Food cupboards—new provided	1
ventilated	2
Hearths repaired	6
Lavatory basins provided	8
Light and ventilation provided or improved	11
Paving relaid or repaired	40
Rooms, passages and staircases—	
—ceilings repaired and/or cleansed and whitened	428
—walls repaired and/or papered or distempered	401
Sinks—new provided	17
Sink or bath waste pipes renewed or repaired	54
Soakaways cleared	6
Stoves renewed or repaired	51
Staircases repaired	116

Steps repaired or renewed	22
Smoke nuisance abated	5
Wash-houses—repaired	3
Water supply—internal supply provided	8
water pipes, etc., repaired	30
cisterns removed	1
Water closets—numbers dealt with	176
new constructed	29
repaired and/or cleansed	140
new pans provided	77
pans cleansed	28
unstopped	3
flushing cisterns provided	44
flushing cisterns repaired	52
seats renewed or repaired	61
Windows—renewed or repaired	158
sashcords provided	341
sills renewed or repaired	40
sash weights provided or adjusted	2
Other matters	89

LEGAL PROCEEDINGS.

Public Health Act, 1936, Section 93.

Proceedings were instituted in three cases under the above Act, for failure to comply with Abatement Notices, with the following results :—

1. Order made for execution of work in 42 days with 10s. 6d. costs and 4s. 0d. special Court fee.
2. Summons withdrawn as work was carried out.
3. Summons withdrawn as work was carried out.

ERADICATION OF VERMIN.

The work of disinfestation of Council houses is carried out by the Local Authority, infested rooms being sprayed with an insecticide.

Premises belonging to private owners are also disinfested on request, and the cost of the work is charged to the owners concerned.

Particulars of action taken during 1948 :—

	Council houses.	*Other houses.*	*Total.*
Number of houses found to be infested ...	22	30	52
Number of houses disinfested	22	30	52

In addition, disinfestation was carried out at a number of premises for eradication of moths, cockroaches and wasps.

SHOPS ACTS, 1912-1934.

Shops have been kept under observation during the year, and two notices to provide additional washing facilities were complied with.

DRAIN TESTING.

Drains at 37 premises were tested during the year, with the following results :—

	No. of tests made	*Found to be sound.*	*Found to be defective.*
New drains	47	42	5
Old drains	11	1	10
	58	43	15

The drains found to be defective were repaired or relaid.

CESSPOOL AND PAIL SYSTEM.

There are still approximately 650 premises in the Eastern and Southern parts of the Borough where the drainage discharges into cesspools.

The Health Department is responsible for this work but the actual emptying of cesspools is carried out by the Borough Engineer's Department, a combined road gully and cesspool emptying machine being used for the purpose.

During the year 9,314 tons of sewage were removed, requiring 809 emptyings, compared with 8,501 tons requiring 744 emptyings the previous year.

Approximately 30 pails are in use in the Borough, of these, 7 are emptied twice weekly by the Public Health Department and the remainder are dealt with by the owners or occupiers.

HOUSE AND TRADE REFUSE REMOVAL AND DISPOSAL.

(a) **Collection.**

Four Shelvoke & Drewry freighters and two Thornycroft vehicles were replaced by six new Shelvoke & Drewry freighters during the year. The total number of vehicles engaged on this service is eight, including one spare, all of which are Shelvoke & Drewry freighters.

The Borough is divided into six main areas, each of which is serviced by one vehicle operated by the driver and three loaders.

One vehicle with driver and one loader is also employed on the collection of trade refuse from large establishments, collections being made more frequently than in the case of ordinary domestic refuse, which is collected weekly.

Refuse collected during the year amounted to 10,798 tons, compared with 10,088 tons the previous year, these amounts being ascertained by test weighing.

(b) **Disposal.**

All refuse is disposed of by means of controlled tipping on land at Denton marshes. This land, approximately 44 acres, in extent, has been used for tipping since January, 1944.

SALVAGE.

Two Shelvoke & Drewry freighters are employed in the collection of salvage, primarily for waste paper and food waste.

Salvaged materials collected and sold during the year were as follows :—

Materials.	*Weight.* Tons.	cwt.	lbs.	*Value.* £	s.	d.
Bones		4	0	1	2	9
Bottles and jars	31	1	0	183	7	1
Food Waste	405	1	0	1,052	17	11
Metal (ferrous)	12	19	0	23	1	5
Metal (non-ferrous)		8	19	13	8	11
Textiles	4	13	37	67	18	10
Waste Paper	295	14	67	2,159	8	3
	750	1	11	£3,501	5	2

DISINFECTION OF PREMISES.

Seventy-nine premises were disinfected and 46 batches of clothing and bedding were disinfected.

PUBLIC CONCENIENCES.

The Health Department is responsible for the staffing and cleansing of public conveniences in the Borough and the collection of receipts therefrom.

One underground convenience, with male and female sections is situated in Parrock Street and includes washing facilities. Male and female attendants are employed at this convenience.

Another convenience for females, provided with attendants and washing facilities is situated on the Gordon Promenade, but is open only during the summer months.

Other smaller public conveniences are situated in various parts of the Borough. These are without washing facilities or attendants.

Conveniences at 14 licensed premises are also cleansed by Health Department employees in consideration of the fact that they are available for the use of the general public at all times.

Conveniences attached to other licensed premises are also kept under supervision.

RATS AND MICE DESTRUCTION.

All infested premises brought to the notice of the Public Health Department during the year were dealt with. The cost of disinfestation at business premises by the Council's Rodent Officer is charged to the occupiers, but the work at private houses is carried out free.

The following report summarises the work carried out during the year 1948 :—

Number of infested premises brought forward from 1947	19
Premises reported as infested during 1948	370
Premises cleared	348
Total number of visits	4,614
Premises still under observation at end of year	41
Estimated number of rats killed	3,263

Two maintenance treatments of the sewers for the destruction of rats were carried out, one during the period 16th February to 20th March and the other during the period 20th September to 30th October. A test treatment was also carried out during the period 18th to 25th February of 10% of the sewer manholes in the areas previously found to be uninfested.

SECTION "D."

HOUSING.

Housing continues to be a major problem. There is a large amount of overcrowding in the town, but statistics are lacking because we have not been able to make a survey. Callers give a Medical Officer distressing accounts of their difficulties The most urgent cases are being dealt with and accommodation is allocated by the Housing Selection Sub-Committee after careful thought. I am particularly grateful for the way in which they considered the families I have put before them, and more especially for those patients suffering from Tuberculosis who have been rehoused during 1948.

The Borough Engineer has kindly supplied the following information :—

Houses completed during 1948	220
Contemplated, 1949	200
,, 1950	200
,, 1951	200
	820

Houses Built by Private Enterprise during 1948—

Houses	23
Bungalows	6
Rebuilds	11
	40

Inspection of Dwelling Houses during the year.

Total number of houses inspected for housing defects (under Public Health or Housing Acts)	1,780
Number of inspections made for that purpose	6,339
Number of dwelling houses found not to be in all respects reasonably fit for human habitation	1,166
Remedy of defects without service of formal Notices :	
Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	1,101

Action under Statutory Powers (Public Health Act).

Number of dwelling houses in respect of which Notices were served requiring defects to be remedied	79
Number of dwelling houses in respect of which defects were remedied :	
(a) by owners	103
(b) by Local Authority in default of owner	5

Housing Accommodation.

Visits have been made to all premises reported as being overcrowded or as being otherwise unsuitable for the health of the occupants. The following is a summary of the action taken and subsequent results, since 1945 :—

	1945	1946	1947	1948	Total
1. Reported to Housing Department as—					
(a) Overcrowded	4	26	28	32	90
(b) Not overcrowded but otherwise unsuitable	1	20	28	22	71
2. Reported to other authorities as—					
(a) Overcrowded		1			1
(b) Not overcrowded but otherwise unsuitable			2		2
(c) Not overcrowded or otherwise unsuitable		1		1	2
3. Inspected but no action considered necessary			34	44	78
4. Conditions found on re-inspection to have been abated at—					
(a) Overcrowded premises			36	28	64
(b) Premises where conditions were otherwise unsuitable			32	20	52

Included in No. 4 were fourteen cases where members of the families concerned were suffering from tuberculosis and five from other illness.

Common Lodging Houses.

There are now no Common Lodging Houses within the Borough. No. 5, The Terrace was in use as a Common Lodging House until March, 1948, when its use as such was discontinued following the Council's requirements for extensive repairs and the provision of satisfactory means of escape in case of fire.

The occupier did not comply with the requirements and the licence therefore was not renewed.

SECTION "E."

INSPECTION AND SUPERVISION OF FOOD.

Food Premises.

Special attention was given to all food premises during the year and many improvements were carried out. The following is a summary of the visits and the results of the inspections :—

	Number of visits.	*Number of Notices Served.*	*Complied with.*
Bakehouses	45	18	14
Butchers	115	24	21
Dairies and milkshops	66	2	2
Dining rooms and cafes	150	27	27
Fish frying establishments	30	6	6
Fishmongers	152	10	10
Greengrocers	258	29	23
Ice-Cream premises	160	4	4
Provision dealers	461	43	33
Other food preparing places	69	6	5
	1,506	169	145

Milk Supply.

There are two dairy farms in the Borough. Seventeen visits of inspection were made, and it was found necessary to make two requests to cleanse premises. Sixty-six visits of inspection to milkshops and dairies were made.

Bacteriological Examination of Milk.

The following table shows the number of samples taken and the results obtained on bacteriological examination :—

		Methylene Blue Test.		*Phosphatase Test.*	
Designation.	*No. of Samples.*	*Satisfactory.*	*Unsatisfactory.*	*Satisfactory.*	*Unsatisfactory.*
Pasteurised ...	62	53	9	62	—

		Methylene Blue Test.		*Coliform Bacilli.*	
		Satisfactory.	*Unsatisfactory.*	*Absent.*	*Present.*
Tuberculin Tested ...	10	8	2	6	4

		Plate Count.		*Coliform Bacilli*	
		Satisfactory.	*Unsatisfactory.*	*Satisfactory.*	*Unsatisfactory.*
Ungraded ...	28	25	3	26	2

Twenty-six samples were also examined for the presence of tubercle bacilli, twenty-five giving a negative result. One sample showed tubercle bacilli to be present, and the affected cow was subsequently slaughtered.

Milk (Special Designations) Order, 1936.

The following licences were issued during the year under the above order :—

"Tuberculin Tested" Milk :	Bottling Licences	... 4
	Dealer's Supplementary Licence	... 1
"Pasteurised" Milk :	Pasteurisers' Licences ...	... 2
	Dealer's Licences	... 8
	Dealer's Supplementary Licence	... 1
"Tuberculin Tested" (Pasteurised) :	Dealer's Licence	... 1

Ice Cream.

There are 42 premises registered under Section 14 of the Food and Drugs Act, 1938, for the sale of ice cream, and 3 for the manufacture and sale of ice cream, 2 under Heat Treatment and 1 by the "Cold Mix" process. ; 156 inspections were made in 1948 and 4 notices served in respect of defects were complied with.

Fifty-eight samples of ice cream were taken and submitted for bacteriological examination with the following results :—

	No. of samples.
Grade 1	20
Grade 2	14
Grade 3	10
Grade 4	14
	58

The system of grading is as follows :—
Grade 1—Time taken to reduce methylene blue $4\frac{1}{2}$ hours or more.
Grade 2—Time taken to reduce methylene blue $2\frac{1}{2}$-4 hours.
Grade 3—Time taken to reduce methylene blue $\frac{1}{2}$-2 hours.
Grade 4—Time taken to reduce methylene blue 0 hours (*i.e.*, reduction at the end of the pre-incubation period).

Slaughterhouses.

There are two licensed slaughterhouses in the Borough, but only one is used for the slaughter of animals and that only in respect of pigs slaughtered by private keepers under licence from the Ministry of Food. Visits of inspection made during the year numbered 18.

Twenty-eight pigs were slaughtered and these, on examination, were found to be free from disease.

The provisions of the Slaughter of Animals Act, 1933, relating to humane slaughtering of animals have been complied with. The number of slaughtermen holding licences at the end of the year was 18.

Unsound Food.

The following food was condemned as unfit for human consumption :—

(a) Carcase meat—

	lbs.		lbs.
Beef (abscesses	27	Bovine Livers (flukes) ...	97
Beef (bone taint)	495	Bovine Livers (unsound) ...	25
Beef (bruised)	209	Mutton (acute lymphadenitis)...	24
Beef (heated and unsound) ...	1,103	Mutton (heated and unsound)...	8
Bovine Kidneys (abscesses)	6		
			1,994

(b) Fish—(unsound)—

	lbs.		lbs.
Bream	182	Huss	154
Cod	213	Kippers	84
Dog Fish	70	Skate	9
Haddock	439	Whelks	336
			1,487

(c) Canned foods (unsound)—

	lbs.		lbs.
Apples	28	Mixed vegetables	29
Apricots	120	Mutton	600
Bacon	15	Oranges	3
Beans	191	Peas	384
Beef	2,203	Peaches	101
Beetroot	51	Pears	58
Brawn	22	Pineapple	12
Carrots	53	Plums	13
Cherries	6	Pork	58
Chicken	11	Potatoes	45
Damsons	8	Pressed meat	175
Egg (dried)	1	Puddings	32
Fish	162	Rabbit	7
Fish cakes	1	Rhubarb	4
Fish roll	68	Sausage	44
Fruit Salad	37	Soup	216
Fruit juice	51	Spaghetti	22
Gooseberries	2	Spinach	22
Grape fruit	94	Steak	8
Grapes	29	Syrup	4
Jam	52	Tomatoes	61
Macedoines	18	Tongue	11
Marmalade	116	Turkey	30
Milk	1,013		
			6,291

(d) **Miscellaneous** (unsound or damaged)—

	lbs.		lbs.
Biscuits	1	Liver sausage	26
Black pudding	28	Meat extract	15
Cake mixture	36	Meat and fish paste ...	59
Cereals	80	Medicinal preparations ...	23
Cheese	78	Mincemeat	5
Chocolate spread	20	Mustard	25
Cocoa	141	Oats	21
Colouring	1	Oranges	599
Currants	115	Pate-de-foix	2
Custard powder	9	Pepper	7
Dates	16	Pickles	42
Eggs	9	Prunes	22
Fruit cordials	217	Pudding mixtures	5
Fruit drinks powder ...	10	Salad cream	84
Flavouring essences ...	1	Sauces	14
Flour	26	Salt	28
Gelatine	11	Soya flour	9
Gherkins	20	Soup powder	20
Gravy powder	11	Spice	1
Jelly	3	Sweets	16
Junket powder	23	Tea	1
Lemons	9	Tonic wine	1
		Vinegar	5
			1,895

Total Approximate Weights.

	Tons	cwts.	qrs.	lbs.
Carcase meat		17	3	6
Canned foods	2	16	0	19
Miscellaneous		16	3	19
Fish		13	1	3
	5	4	0	19

Food and Drugs Act, 1938.

One hundred and twenty-four samples were taken under the Food and Drugs Act, 1938, and submitted to the Public Analyst. Particulars of the samples and a summary of the results are shown in the following table :—

Samples.	*Number of*		*Result of Analyses*	
	Formal.	*Informal.*	*Genuine.*	*Adulterated.*
Baking powder	—	2	2	—
Barley flakes	1	—	1	—
Butter	2	—	2	—
Camphorated oil	—	1	1	—
Candied peel	—	1	1	—
Castor oil	—	1	1	—
Coffee	1	—	1	—
Cooking fat	2	—	2	—
Curry powder	—	1	1	—

Fish paste	1	1	2	—
Gin	2	—	2	—
Ginger beer	—	1	1	—
Glycerine of Thymol	—	1	1	—
Halibut oil	—	1	1	—
Ice cream	—	5	5	—
Jam	2	—	2	—
Lemonade	—	1	1	—
Margarine	2	—	2	—
Marmalade	1	—	1	—
Meat paste	—	1	1	—
Meat pie	—	1	1	—
Milk	66	—	62	4
Mustard	—	1	1	—
Nutmeg	—	1	1	—
Ointment	—	2	2	—
Orangeade	—	1	1	—
Pepper	—	1	1	—
Pickles	1	—	1	—
Rum	5	—	5	—
Sauce	—	1	1	—
Sausages	1	—	1	—
Sausage meat	1	—	1	—
Sausage roll	—	1	1	—
Soup powder	—	1	1	—
Spice	—	1	1	—
Tincture of iodine	—	1	—	1
Vinegar (malt)	—	1	1	—
Vinegar (non-brewed)	—	2	2	—
Whisky	4	—	4	—
	92	32	119	5

Particulars of adulterated samples and action taken :—

MILK, SAMPLE NO. 465 : Contained at least 8% added water. A letter of caution was sent to the vendor after special circumstances had been taken into consideration.

MILK, SAMPLE NO. 499 : Contained 8.39 per cent. non-fatty solids instead of 8.50 per cent. It was suggested by the Public Analyst that this result was probably due to the breed of cows, and he recommended that the source of supply be examined. The matter was reported to the Kent County Authorities as the farm concerned was outside the Gravesend area.

MILK, SAMPLE NO. 551 : Deficient in fat to the extent of 4 per cent. Further "appeal to the cow" and transit samples were taken (see Sample H. 645).

MILK, SAMPLE NO. H. 645 : Deficient in fat to the extent of 14 per cent. Reported to County Sampling Officer.

TINCTURE OF IODINE, SAMPLE NO. 576 : Contained 2.39 per cent of iodine instead of 2.45 per cent. The vendor was cautioned.

SECTION "F."

PREVALENCE AND CONTROL OVER INFECTIOUS AND "OTHER DISEASES."

Infectious Diseases.

There were recorded 252 cases of notifiable infectious diseases. Excluding Tuberculosis, 197 notifications were made. A summary is given at the end of the report.

There were no cases of Diphtheria.

The one case of Ophthalmia Neonatorum admitted to Kent Ophthalmic Hospital, Maidstone, recovered without impairment of vision. The others remained under the care of their practitioners at home.

Anterior Poliomyelitis.

There was one case of Anterior Poliomyelitis during the year.

Institutional Accommodation for Infectious Diseases.

Patients needing institutional accommodation, either for treatment or isolation, were sent to the Bow Arrow Hospital, Dartford.

The other arrangements include the following :—

(a) Ophthalmia Neonatorum—Kent Ophthalmic Hospital, Maidstone.
(b) Smallpox—Capel Hospital, Dislingbury, through the County Medical Officer.
(c) Tuberculosis—arrangements made by the County Medical Officer.

Diphtheria Immunisation.

The arrangements in operation up to the 5th July, 1948, were as follows :—

1. Immunisations were carried out at every Doctor's session at each Welfare Centre.
2. As pecial diphtheria immunisation session was held weekly at the Central Welfare Centre and School Clinic.
3. Immunisations on behalf of the Local Authority were carried out by General Practitioners at their Surgeries.
4. Birthday cards were sent out to every infant.
5. Enquiries were made of each mother attending the Clinics by the Medical Officer and Health Visitors regarding immunisation, and the Health Visitors were instructed to follow up all cases in which there was no record of the injections having been given.
6. Advertisements appeared in the local press and on hoardings at frequent intervals.

This work is now under the control of the Kent County Council. A few cases of diphtheria in a neighbouring town had a marked affect on the demand for immunisation and the Medical Officer of Health took the opportunity of visiting most of the Schools in the Borough. In this way a large number of immunisations were carried out. It is interesting to note that a number of the children who had been immunised a short time before, brought notes from their parents asking for an additional "booster dose" to be given so as to be on the safe side.

The figures for the year are as follows :—

During the year, 7,038 children under fifteen have been immunised—2,103 under five years and 4,935 over five years of age.

The percentage of children under fifteen immunised during the year is as follows :—

	Under 5 years.	*5 and under 15 years.*	*Total.*
Immunisations	2,103	4,935	7,038
Estimated Child Population ...	4,025	6,133	10,158
Percentage	52.2	80.5	69.3

Vaccination.

When the National Health Service Act, 1946, came into operation the Vaccination Acts were repealed and infant vaccination ceased to be compulsory.

The following statistics may be given :—

Two hundred and eighty-six vaccinations were carried out during the six months ended 30th June, 1948.

Vaccinations for the six months ended 31st December, 1948, were as follows :—

	Under 1 year.	*1-4 years.*	*5-14 years.*	*15 years and over.*	*Total*
Primary Vaccinations	132	9	4	314	459
Re-vaccinations	—	1	6	244	251

Smallpox Prevention.

In March, 1949, there were a number of smallpox contacts in the town. The majority of these were most co-operative but a few seemed to expect to be looked after in a way which would be quite impossible during an epidemic. Further, one old lady refused to be vaccinated and there were two male contacts I saw one Saturday afternoon, who required a great deal of persuasion. Fortunately smallpox did not occur in the town.

There is no doubt that the presence of one or two smallpox patients in Gravesend would awaken the public conscience and there would be a heavy demand for vaccination. It ought, however, to be pointed out that in this country at the present time a few smallpox cases in a town would not generally be regarded as an indication for mass vaccination. Careful listing of all persons in contact with the disease, immediate vaccination (within 24 hours) and continued surveillance are to be depended on as the main measure of control.

All children should be vaccinated in infancy and four months is given as the optimum age. Re-vaccination on entry and again on leaving school is advised. Persons at special risk such as doctors, nurses and sanitary inspectors, etc., should be re-vaccinated at yearly intervals.

Now that the Vaccination Acts have been repealed, it is to be hoped that residents of Gravesend will realise their responsibilities in this vital matter. I know that the Council will join with me in expecting them to help to keep our town a healthy place.

Tuberculosis.

The Kent County Council are responsible for all arrangements in connection with the diagnosis and treatment of Tuberculosis.

The Tuberculosis Clinic is provided at the Gravesend and North Kent Hospital, where patients are seen every Wednesday at 1.0 p.m.

Public Health (Tuberculosis) Regulations, 1930.

Notification of New Cases.

In 1948, 55 cases were notified. The following table gives comparative particulars over the last nine years :—

Year.	*Estimated Population of Registrar General.*	*Pulmonary.*	*Non-Pulmonary.*	*Total.*
1940	35,550	28	5	33
1941	34,100	48	8	56
1942	35,460	43	12	55
1943	35,260	48	10	58
1944	35,080	34	8	42
1945	36,090	32	4	36
1946	40,340	45	9	54
1947	41,630	75	8	83
1948	42,890	48	7	55

The sources from which the notifications of tuberculosis were received :—

Tuberculosis Officer	20
Private Medical Practitioners	30
General Hospitals and Institutions	2
Service Establishments	3

Age and Sex Distribution.

The following table shows the age and sex distribution of our 55 new cases :—

Age Periods.	*Pulmonary*		*Non-Pulmonary.*	
	Male.	*Female.*	*Male*	*Female.*
0-1	—	—	—	—
1-5	—	—	—	—
5-10	—	2	1	—
10-15	2	1	2	1
15-20	5	6	—	—
20-25	6	1	—	1
25-35	6	4	—	—
35-45	3	1	—	1
45-55	6	3	—	1
55-65	2	—	—	—
65 and upwards	—	—	—	—
	30	18	3	4

Occupational Analysis :—	*Male*	*Female.*
Army	1	—
Assurance Official	1	—
Builder's Labourer	1	—
Cement Labourer	1	—
Civil Servant	1	—
Clerk	1	1
Domestic Servant	—	1
Draper	1	—
Ex-Army	3	—
Farm Worker	1	—
Fitter	1	—
Foreman	1	—
General Labourer	1	—
Housekeeper	—	1
Housewife	—	8
Inn Keeper	1	—
Joiner	1	—
Laundry Packer	—	1
Machinist	1	1
N.A.A.F.I. Store Keeper	1	—
Royal Navy	2	—
Rubber Worker	—	1
Scholar	6	4
Sheet Metal Worker	1	—
Shop Assistant	—	1
Student	1	—
Telephonist	—	1
Tyre Builder	1	—
Timber Porter	1	—
Typist	—	2
Nil	3	—
	33	22

Deaths and Death Rate.

There were 23 deaths registered from Pulmonary Tuberculosis and 2 from Non-Pulmonary. This gives a death rate of .58 per 1,000 population for all forms of Tuberculosis.

The following table compares the figures for 1948 with those of the previous years :—

	Pulmonary		*Non-Pulmonary*		*Total*
Year.	*Number.*	*Rate per 1,000 Pop.*	*Number*	*Rate per 1,000 Pop.*	*Rate per 1,000 Pop.*
1940	24	.67	3	.08	.75
1941	15	.43	2	.05	.48
1942	18	.5	6	.16	.66
1943	21	.59	6	.17	.76
1944	15	.42	2	.05	.47
1945	19	.52	4	.11	.63
1946	16	.37	2	.05	.42
1947	24	.57	2	.04	.62
1948	23	.54	2	.05	.58

Tuberculosis Register.

The names of 44 persons were removed from the Register for the following reasons :—

Deaths	20
Left the District	17
Lost sight of	1
Recovered	5
Not confirmed	1
	44

Three hundred and eighty persons remained on the Register on 31st December, 1948. They consist of the following :—

	Males.	*Females*	*Total.*
Pulmonary	193	130	323
Non-Pulmonary	24	33	57
	217	163	380

Sanatorium and Hospital Treatment.

Thirty-three patients suffering from Pulmonary Tuberculosis were admitted to Sanatorium. Two Non-Pulmonary cases received treatment in Hospitals.

Legal Proceedings.

No action was necessary during the year under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Section 172 of the Public Health Act, 1936.

Venereal Diseases.

Administrative arrangements are now under the control of the South East Metropolitan Regional Hospital Board.

The Surgeon in charge of the Gravesend Clinic, C. M. Ockwell, Esq., F.R.C.S., has kindly supplied the following statistics :—

New Patients—Gravesend.	*Male.*	*Female.*	*Total.*
Syphilis	6	6	12
Soft Sore	1	—	1
Gonorrhoea	9	3	12
Non-Venereal	35	11	46
	51	20	71

Total No. of Patients (new) from all areas	422
No. of attendances of Gravesend Patients	1,207
Total No. of attendances—all areas	3,638

Discharges (all districts).

Discharged cured :—

	Male.	*Female.*	*Total.*
Syphilis	10	8	18
Soft Sore	3	—	3
Gonorrhoea	17	14	31
Non-Venereal	71	29	100
	101	51	152

Defaulted before Completion of Treatment :—

	Male.	*Female.*	*Total.*
Syphilis	1	—	1
Soft Sore	1	—	1
Gonorrhoea	3	—	3
Non-Venereal	—	—	—
	5	—	5

Cleanliness, Good Health and Elimination of of Verminous Conditions.

The Health Visitors have been active in their educative work in regard to cleanliness and freedom from vermin.

Scabies.

During the year, 108 persons suffering from scabies were met with. This includes 41 school children. The total figure for the last year was 197.

All cases were treated at the Corporation Cleansing Centre which was opened in 1945. A female cleanliness officer and a male attendant are provided; 194 treatments were given. The facilities are thoroughly satisfactory and the service is much appreciated.

Corporation Mortuary.

Twenty-three bodies were received and 22 post-mortems performed.

Coroner's Inquests.

H. M. Coroner has kindly supplied the following information :—

Total number of inquests	18
Number of inquests without post-mortems	—
Number of post-mortems without inquests	38
Verdicts	18
Accidental deaths	11
Suicides	4
Found drowned	—
Other verdicts	3

Causes of Death in Gravesend for 1948, as provided by the Registrar General.

		Male.	*Female.*	*Total.*
1.	Typhoid and Paratyphoid Fever ...	1	—	1
2.	Cerebro Spinal Fever	—	—	—
3.	Scarlet Fever	—	—	—
4.	Whooping Cough	—	—	—
5.	Diphtheria	—	—	—
6.	Tuberculosis, Respiratory	15	8	23
7.	Tuberculosis, Other forms	2	—	2
8.	Syphilitic Diseases	5	1	6
9.	Influenza	1	2	3
10.	Measles	—	—	—
11.	Acute Poliomyelitis	—	—	—
12.	Acute Encephalitis, Infantile	1	—	1
13.	Cancer—Oesophagus and Uterus ...	3	7	10
14.	Cancer—Stomach and Duodenum ...	5	8	13
15.	Cancer—Breast	—	10	10
16.	Cancer—All other sites	25	17	42
17.	Diabetes	2	1	3
18.	Intracranial vascular lesions	21	45	66
19.	Heart Diseases	64	63	127
20.	Other Circulatory Diseases	8	7	15
21.	Bronchitis	14	5	19
22.	Pneumonia	12	4	16
23.	Other Respiratory Diseases	2	2	4
24.	Ulcer of Stomach or Duodenum ...	3	1	4
25.	Diarrhoea—under 2 years	1	1	2
26.	Appendicitis	1	1	2
27.	Other Digestive Diseases	4	2	6
28.	Nephritis	10	4	14
29.	Puerperal and post abortion sepsis ...	—	—	—
30.	Other maternal causes	—	2	2
31.	Premature births	2	3	5
32.	Congenital Malformations	6	5	11
33.	Suicide	1	1	2
34.	Road Traffic Accidents	4	3	7
35.	Other violent causes	2	3	5
36.	All other causes	24	16	40
	Total—All causes ...	239	222	461

Deaths of Infants under 1 year.

	Male.	*Female.*	*Total.*
Legitimate	12	10	22
Illegitimate	1	—	1
Total	13	10	23

Births—for Infant Mortality Rate, etc.

LIVE BIRTHS:	*Males.*	*Females.*	*Total.*
Legitimate	407	389	796
Illegitimate	16	18	34
Total ...	423	407	830
STILL BIRTHS:			
Legitimate	5	4	9
Illegitimate	2	—	2
Total ...	7	4	11

INFECTIOUS DISEASES NOTIFIED DURING 1948.

Disease.	*Under one year*	*One and under 3 yrs.*	*3 and under 5 yrs.*	*5 and under 10 yrs.*	*10 and under 15 yrs.*	*15 and under 25 yrs.*	*25 and under 45 yrs.*	*45 and under 65 yrs.*	*65 years and over*	*Total*	*Number removed to Hospital*
Scarlet Fever	—	1	4	8	5	—	1	—	—	19	6
Diphtheria	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	9	28	25	35	2	1	—	—	1	101	—
Measles	—	15	13	19	1	—	—	—	—	48	1
Erysipelas	—	—	—	—	—	—	2	1	2	5	1
Ophthalmia Neonatorum ...	5	—	—	—	—	—	—	—	—	5	1
Puerperal Pyrexia	—	—	—	—	—	—	1	—	—	1	—
Anterior Poliomelitis ...	—	—	—	—	—	1	—	—	—	1	1
Pneumonia	—	1	3	—	1	—	2	4	2	13	—
Para-Typhoid	—	—	—	—	—	—	—	—	—	—	—
Cerebro Spinal Fever ...	1	—	—	—	—	—	—	—	—	1	1
Food Poisoning (Salmonella) ...	—	1	—	—	—	—	—	—	—	1	—
Malaria (B.T.)	—	—	—	—	—	1	—	—	—	1	—
Malaria (Induced for therapeutic purposes) ...	—	—	—	—	—	—	—	1	—	1	—
Dysentery	—	—	—	—	—	—	—	—	—	—	—
Respiratory Tuberculosis ...	—	—	—	2	3	18	14	11	—	48	7
Non-Respiratory Tuberculosis	—	—	—	1	3	1	1	1	—	7	2
Total ...	15	46	45	65	15	22	21	18	5	252	20

BIRTHS AND DEATHS.

BIRTH AND DEATH RATES FOR LAST TEN YEARS.

Year	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Number of births	686	621	536	730	730	725	761	1025	1029	830
Birth rate (per 1,000 population) ...	16.8	17.46	16.51	20.58	20.7	20.6	21.0	25.4	24.7	19.35
Number of deaths	410	506	470	447	434	435	430	437	438	461
Death rate (per 1,000 population) ...	10.5	14.2	13.7	12.6	12.3	12.4	11.9	10.83	10.52	10.75

CAUSES OF DEATH OF INFANTS UNDER ONE YEAR OF AGE.

	Total		*Under 1 week*		*Under 1 month*		*1 and under 3 months*		*3 and under 6 months*		*6 and under 9 months*		*9 and under 12 months*	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Prematurity and Congenital Debility	3	3	3	3	—	—	—	—	—	—	—	—	—	—
Pneumonia	2	3	—	1	—	1	—	1	1	—	—	—	1	—
Congenital Malformation ...	4	—	4	—	—	—	—	—	—	—	—	—	—	—
Diarrhoea and Enteritis ...	1	1	—	—	—	—	—	1	—	—	1	—	—	—
Other causes	3	3	3	2	—	1	—	—	—	—	—	—	—	—
	13	10	10	6	—	2	—	2	1	—	1	—	1	—
Totals ...	23		16		2		2		1		1		1	

BACTERIOLOGICAL EXAMINATION OF BATHING POOL WATER.

	Where taken.	*No. of organisms per c.c. capable of growth on Agar at* 37°C.	22°C.	*B. coli presumptive.*	*Remarks.*
1.	Deep end	69	72	Present in 20 ccs. Absent in 10 ccs.	Not typical B. coli. No faecal contamination.
2.	Shallow end	2	2	Absent in 100 ccs.	Satisfactory.
3.	Shallow end	2	2	Absent in 100 ccs.	Satisfactory.
4.	Deep end	5	7	Absent in 100 ccs.	Satisfactory.
5.	Shallow end	4	11	Absent in 100 ccs.	Satisfactory.
6.	Deep end	10	12	Absent in 100 ccs.	Satisfactory.
7.	Deep end	0	2	Absent in 100 ccs.	Satisfactory.
8.	Shallow end	7	5	Absent in 100 ccs.	Satisfactory.
9.	Deep end	220	300	Present in 1 cc.	Typical B. coli in 100 ccs. Inadequately treated.
10.	Shallow end	444	592	Present in 60 ccs. Absent in 50 ccs.	Typical B. coli in 90 ccs. Inadequately treated.
11.	Shallow end	3	1	Absent in 100 ccs.	Good water. Efficiently treated.
12.	Deep end	3	2	Absent in 100 ccs.	Good water. Efficiently treated.

BACTERIOLOGICAL EXAMINATION OF BATHING POOL WATER.

	Where taken.	*No. of organisms per c.c. capable of growth on Agar at* 37°C.	22°C.	*B. coli presumptive.*		*Remarks.*
13.	Shallow end	3	3	Absent in 100 ccs.	Good water.	Efficiently treated.
14.	Deep end	1	0	Absent in 100 ccs.	Good water.	Efficiently treated.
15.	Deep end	30	45	Absent in 100 ccs.	Satisfactory.	
16.	Shallow end	4	1	Absent in 100 ccs.	Good water.	
17.	Deep end	88	16	Absent in 90 ccs. Present in 100 ccs.	Not typical B. coli. No evidence of faecal contamination.	
18.	Shallow end	31	28	Absent in 100 ccs.	No evidence of faecal contamination.	
19.	Deep end	38	18	Present in 100 ccs. Absent in 90 ccs.	Not typical B. coli. No evidence of faecal contamination.	
20.	Shallow end	55	188	Absent in 100 ccs.	No evidence of faecal contamination.	
21.	Deep end	38	15	Present in 100 ccs. Absent in 90 ccs.	Not typical B. coli. No evidence of faecal contamination.	
22.	Shallow end	12	9	Absent in 100 ccs.	Satisfactory.	
23.	Deep end	2	6	Absent in 100 ccs.	Satisfactory.	

BACTERIOLOGICAL EXAMINATION OF BATHING POOL WATER.

	Where taken.	*No. of organisms per c.c. capable of growth on Agar at* 37°C.	22°C.	*B. coli presumptive.*	*Remarks.*
24.	Shallow end	5	14	Absent in 100 ccs.	Satisfactory.
25.	Deep end	4	5	Absent in 100 ccs.	Satisfactory.
26.	Shallow end	69	66	Absent in 100 ccs.	No evidence of faecal contamination.
27.	Paddling Pool	128	124	Absent in 100 ccs.	No evidence of faecal contamination.
28.	Deep end	3	0	Absent in 100 ccs.	Satisfactory.
29.	Shallow end	56	8	Absent in 100 ccs.	No evidence of recent faecal contamination.
30.	Deep end	6	8	Absent in 100 ccs.	Satisfactory.
31.	Shallow end	2	26	Absent in 100 ccs.	Satisfactory.
32.	Deep end	4	2	Absent in 100 ccs.	Satisfactory.
33.	Shallow end	2	5	Absent in 100 ccs.	Satisfactory.

SIGNIFICANCE OF HEALTH ADMINISTRATION

BY

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Significance of Health Administration

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"The longer you can look back,
the further you can look forward."

THIS is the message of Mr. Winston Churchill in his address to the Royal College of Physicians, and it may help us to understand more clearly what is going on in our Health and Social Services. Any attempt to focus the idea of health in its historical setting, carries with it more than the risk of trying to tell small fragments of the thrilling story which the practitioner has learned from his youth up. But this must be accepted, for there may emerge a clue to the prevention of some of the failures which have already occurred in the history of our ancient art.

Public Health and Social Medicine

The responsibilities of the Medical Officer of Health were outlined in a 1925 Ministry Memorandum. This was to the effect that the Medical Officer should endeavour to acquire a knowledge of the many factors, social, environmental and industrial, which may operate prejudicially in his district and that it was his duty to advise the local authority on the application of preventive principles for the welfare of the community.

There is, of course, a wide range of community

services involved in promoting the health of modern society; this brings together not only doctor and layman but also the members of a variety of other professions whose work has a bearing on health.

In recent years the term "social medicine" has become fashionable and it is a valuable conception if only to draw attention to the new social interests with which public health has become infused. Logically the larger ought to include the more limited which disappears as a separate entity. But this would present difficulties. Social medicine is no new idea. In the past the pioneers of public health have laid down the fundamentals of social medicine. The social reformer and the public health worker have always tried to correlate and to do what they could to improve the circumstances of the individual as well as the community. And too numerous to mention are the medical officers who for many years, during the ordinary course of their duties outside the limitations of the statute book, have been and still are engaged in social medicine in a wide sense. There is no general agreement that this term is justified and its exact meaning is a matter for controversy. Strange as it may seem, a recent writer has referred to the "rudimentary character of much of the study of social medicine." In the discussion which follows, therefore, no separation will be made, and Prof. Crew's comprehensive definition will be taken to apply to the older and more homely term "public health." It "includes within its province all that pertains to man's well-being, taking into account not only the make-up of man himself but also his external world and his inter-relationship with it." The significance of this connotation will become apparent when we refer to the trend of thought in other spheres of knowledge.

The Idea of Health—The Ancient World and Later

Good sanitation stretches back into older civilisations than the Greek, and there is evidence of town planning in ancient Mesopotamia and Egypt. Throughout the centuries of Greek and Roman ascendancy, medicine may be observed in the twin streams of rational and magical practice. With the coming of Hippocrates the foundations for scientific method were laid down. Men learned that medicine must not rest on vague speculation but on observation and accurate recording of all the facts available; that is to say, on those principles which still remain to-day the basis of clinical study at the bedside. But the purity of the Hippocratic tradition was not maintained, and even in modern times the two streams are by no means wholly distinguished. Superstitious folly is with us still.

In contrast to our thought to-day, Plato implies that illness which may be expected of an artisan is a shameful thing in a man of culture. Galen, at the end of the period, is even more explicit, and through the innumerable varieties of government in the centuries that lie between the rise of Ionic philosophy and the flickering out of original speculation in the later empires, this factor remains broadly constant. We have climbed rapidly in the last century from conditions of urban and personal squalor, and it is tempting to graph our course as a steady ascent. But in fact the downfall in the early Christian centuries was rapid, also, and in some ways the standards of Greek and Roman civilisations have scarcely yet been reached again. The Greeks, and people influenced by them, were intent on producing a good citizen of this world. The Stoic Marcus Aurelius expressed this idea. The gods, except for purposes of official convenience, were dead and Nature was all. Followed to its

logical conclusion this was inevitably a pessimistic view leading to a sense of imprisonment and lack of direction.

Christianity swept back the horizons; at one stroke the converted turned their eyes away from this world to gaze upon the next. This shift had a fundamental effect on the condition of the people, both communal and personal. We cannot pause here to pursue the fortunes of the idea of health throughout the mediæval period. As we know, in matters of hygiene the middle ages were a byeword throughout European urban society, and with the coming of the Renaissance there was little improvement. Yet some remnants of the ancient love of order and cleanliness in personal habits were preserved among other traditional elements in the Benedictine rule which dominated Western monasticism for six centuries. But the purity of the Hippocratic tradition could not be maintained. Medical knowledge which did persist was both small in volume and most debased in type. Such as it was the Church preserved it; not from any extended love of learning and certainly not from any interest in science, but because such texts that remained were in the monasteries, where only could be found men capable of deciphering and copying them.

Southern Italy, in touch with fertilising influences, witnessed the first revival of learning in the West. The tiny stream begins to swell again, not from fresh sources, but because more water from the original river, driven underground, now rises to the surface to increase the flow.

The Approach to Modern Times

In the fourteenth century the mediæval idea of universalism began at last to disintegrate.

The conception of the nation state arose, with sovereignty within its borders even over the Church herself. Her own Christian ideals of freedom and equality began to work within her and to emerge as social ferment. In the realm of science and medicine the break-up of old assumptions came slowly. As early as the thirteenth century Roger Bacon had introduced the idea of "observation" as a method of studying natural phenomena. Dr. Singer calls him the first man of science in the modern sense. In the fifteenth century the idea of experiment began again to find expression. Anatomy made advances through the unexpected medium of the Italian painters, and the note-books of Leonardo showed the influence of brilliant personal dissection. Paracelsus in 1527 made his dramatic and symbolic gesture against authority by burning the works of Galen and Avicenna in his lecture room at Basel. But in the year 1543 the works of Copernicus and Vesalius finally weighed down the balance and the modern way of scientific thought had begun. By 1615 Harvey grasped his conception of the circulation of the blood which became the basis of modern physiology and with it modern medicine.

There was, of course, no sudden and complete acceptance of the new. In many quarters the old view died hard. The humoral pathology of Galen remained unchallenged for many years; the literature of the time as well as the science attests to this. Copernican views, especially if their philosophical implications were pressed, could not be held with impunity in Catholic Europe, and Bruno was martyred for such opinions in 1600. Francis Bacon, living in a country which had become Protestant, kept soberly within the limits of safety. But he was perhaps the first to realise fully what it was that was hap-

pening to human thought, and the conception of his "Instauratio Magna" altered the whole method of knowing and teaching to know. The scientific systems of the ancient world had at last become historical curiosities, though the Ionic method of fearless conclusion, drawn from direct observation, was abroad again in full vigour after an eclipse of nearly two thousand years. It is not necessary for our purposes to follow the story to the present day; it is enough to mark the mode of thought, the method of direct observation of the behaviour of the human body. After a long period of history deeply affected by the assumption that the body was of little importance in comparison with the "soul," there emerged at last an age of concentration on the body which has resulted in an increase of natural knowledge concerning its ways unprecedented, as far as we know, in human development.

In striking contrast to achievements in science and philosophy, it was not until the beginning of the nineteenth century that ideas in the matter of environmental health began to take effect. The system of officerships of health had of course been known in Ancient Greece, and was well established in Greco-Roman times. Sir Thomas More gave us in 1516, his vision of an ideal state in which health is to be achieved through the whole manner of hygienic living in pleasant and clean surroundings. No one perhaps since Plato had shown so clear a consciousness of the vital relationship of good health to the good life. Francis Bacon, a century later, treats of health provisions in his ideal state, the "New Atlantis," from a different angle. He had a proverbially low opinion of doctors and sets his citizens to experiment in the search for a more exact science of health and gives his City a

"Conservator of Health," a forerunner, as it were, of our Medical Officers. Nevertheless, it was not until 1777-1788 that Johann Peter Frank, Professor at Pavia and later at Vienna, published his "Complete System of Medical Policy," which has been characterised as the very foundation of modern public hygiene and a noble monument of life-long devotion to humanity. It deals with many aspects of communal and personal hygiene and even the provision of school meals.

The most influential of Frank's ideas is the assumption that the health of the people is a duty belonging to the State, a duty which should be enforced most strictly. He is the first to teach Public Health in any University and he must be regarded as a great pioneer in health legislation.

Meanwhile the growing humanitarian movement of the eighteenth century was exerting its influence in almost every department of national life: its ultimate repercussions on social health were enormous, and by the end of the century the soil was well prepared for the great increase which the nineteenth and twentieth centuries were to see in the responsibility assumed by the State for the health of its citizens. Jeremy Bentham examined existing institutions with the object of discovering whether they furthered "the greatest happiness of the greatest number." He accepted the principle of brotherhood and humanitarianism as an adequate basis of philosophy and discarded metaphysical speculation. And he produced a practicable programme of reform which served to unite men whose ultimate notions differed widely. Among his disciples was Edwin Chadwick, who had worked in a Scrivener's office and was later called to the Bar. He absorbed his master's outlook and decided to join the Royal Commission appointed to investigate the state of the Poor Law. But

the Poor Law Amendment Act, 1834, did not end their labours.

At this time, it will be remembered, even primitive sanitary arrangements were almost unknown in the greater part of Britain. There were no competent sewers. The householder stored his filth as he liked and got rid of it as he could. "Water closets," such as they were, had only just begun to be used in the better homes. Almost all houses had cesspools—which usually leaked and stank—and in towns the cesspools generally occupied the basement. Infected well water and polluted river water was used for drinking purposes, and the clergy prescribed fast days as an efficacious sanitary regime.

In 1842 Buccleuch's Commission issued the famous report on the sanitary conditions in Britain. Chadwick was responsible for this. The first Public Health Act followed in 1848. Chadwick established and, unhappily, wrecked the Central Department of the Poor Law. Now he had a new opportunity in Public Health, for he became a member of the General Board which was founded in 1848. He was master of environmental theory, but his lack of insight prevented him from perceiving the dangers and limitations of his methods. His aggressive superiority made him bitter enemies, and just as the Board came into action there was an outbreak of cholera in England. 54,000 people died from it. The British people, in such need of sanitary improvements, would not tolerate the ministrations of Chadwick and the Board of Health was dissolved. *The Times* in 1855 wrote: "We prefer to take our chances of cholera and the rest than to be bullied into health." And he had to go. As Harley Williams suggests, Public Health has never been wholly free from the shadow of the past.

Public Health has been referred to as the offspring of the old Poor Law. It was, however, the general acclimatisation of public opinion to the sanitary idea which made the increasing degree of State control possible. There were a number of factors which played a part. Some have been mentioned: the humanitarian ideal; its practical application to statecraft, which was the contribution of Benthamism; fear of contagion, which intensified the more generalised feeling among the middle-classes that the close proximity to them of the destitute poor in slum districts constituted a danger in itself. The work of the Commissioners, and supremely that of Chadwick himself, spread factual knowledge of the conditions which gave precision and focus to vague trends of opinion. The personal work of the group of sanitarians who either helped him, or made cognate investigations of their own, also added to the total result. Among these men were Dr. Southwood Smith, and the City of London's first Medical Officer, Dr. John Simon.

Sir John Simon became the first Medical Officer to the General Board of Health after Chadwick's failure. His character was a striking contrast for he had the gift of philosophical detachment—he was judicious and conciliatory, and his leadership was to see the dawn of modern preventive medicine. Simon laid down the ethic and the method of Public Health and in this regard he may be referred to as "the modern Hippocrates."

Towards a Revolution in Medico-social Services

Turning now to the present day, it is only necessary to refer to some of the new legislation to realise the far-reaching changes which are being brought about.

(1) *The National Health Service Act,* 1946—provides a complete medical service, free of charge (at the time it is required) for every citizen. It has replaced the old Insurance Acts with their limitations and has brought to an end separate provision for the sick poor.

(2) *The National Assistance Act,* 1948—provides a comprehensive scheme of "welfare." It is the "final break up" of the Poor Law. Taken together with National Insurance the object is to prevent destitution, rather than to relieve it when it has occurred.

(3) *The National Insurance Act,* 1946—Under this complex Act cash benefits are paid in a variety of circumstances in return for compulsory contributions.

(4) *The National Insurance (Industrial Injuries) Act,* 1946—repeals existing legislation and establishes compulsory insurance for accidents for everyone in insurable employment.

The four acts, considered together with Family Allowances, represent a unified State system of social security for all, according to need. The legislation has been so developed that Britain is far in advance of any other country in the world in providing social security. This has been characterised as "security from womb to tomb."

Our debt to the genius of Lord Beveridge must not be forgotten. In his classical report of 1942 he suggested that a satisfactory scheme of social security should include: (a) *Children's allowances;* (b) *Comprehensive health and rehabilitation services* for prevention and cure of disease, and restoration of capacity for work, available to all members of the community. These basic assumptions have now been implemented.

Relation between Health and Local Control

That there is lack of knowledge of the relation of health to control of local affairs will be apparent when one considers the apathy of local electors in many parts of the country.

Public Health, as we have indicated, had a lowly origin as the offspring of the old Poor Law. As the years passed by, its course began to diverge and now it is entirely free. So to-day, though the problem is a different one, yet—the administration of health affairs is so much bound up with local government and other agencies, that the future of the services must depend in large measure on the wisdom and skill of statesmen and ministers, and on the understanding of those who have the responsibility of local government.

One has only to begin in the first half of the nineteenth century, and glance through health legislation to the present day, to realise the progressive trend in the creation of larger units of local government. During the past few years there has been a shifting of responsibilities from the County Districts to County Councils, and a transfer of services to regional or national bodies constituted otherwise than by popular election.

The Education Act, 1944, transferred the School Health Service to the major authorities and the National Health Service Act removed Maternity and Child Welfare from Boroughs and urban districts to County Councils. District councils are asking whether such changes result in better service to the community.

Attention has been drawn to instances in which County Councils have failed to adopt schemes of decentralisation for certain services under the National Health Service Act, although the Minister gave clear guidance:—"In the sub-

division the County Council as Local Health Authority would, of course, retain its responsibility for policy and finance unimpaired, *but to day-to-day administration the sub-committee would bring the local interest and knowledge which are so desirable in such personal services.*"

Many district councils have been more hopeful on this account in regard to the outcome of the Boundary Commission which has recently visited county districts to collect data for future policy. It is now known, however, that the Local Government Boundary Commission Act, 1945, is to be repealed; this will mean winding up the Commission. We may hope that reform so urgently needed may not be long delayed.

Relevance of the Doctor and Patient Relationship

The doctor and patient relationship needs mention here, for it has a bearing on the outlook of the administrator. While on his daily round the practitioner takes this relationship very much for granted; indeed it may not be until he himself "falls into the hands of the physician" that the "inwardness" of it comes home to him. For example, a young doctor during illness in hospital has been known to consult textbooks to find out whether the medicine he is offered is based on "experimental" pharmacology. Yet in the absence of satisfactory evidence he is soon observed to be taking cheerfully the mixture his nurse pours out, and before he returns home may learn that *materia* medica often plays only a *small* part in the process of cure. And even when it plays an important part, there are creative and healing influences which may grow out of a relationship between two human beings. This point is again illustrated in successful psychotherapy which does not depend on "bottle" medicine in any way.

As Sydenham pointed out to his contemporaries when he diverted their minds from speculation, medicine is more than science; it is an art. Singer reminds us that science is not formal logic, and that medicine is not now and never has been followed wholly in the scientific spirit.

It is probably not too much to say that in every department of medicine successful therapy depends on the ability of the physician to make good use of the values of Hippocrates *and* Aesculapius. In other words the wise doctor is an eclectic.

Now, mention of Aesculapius will lead to protest. For instance, the *B.M.J.* (1942) refers to the danger that the doctor will approach medico-social issues with propagandist aims which are not strictly medical in origin; that he will go still further in usurping the place of the priest in society through a flush of humanitarian emotion and that the medical profession will return to its beginnings in the Temples of Aesculapius. No doubt these hazards will have to be resisted, but it must be said that it would indeed be deplorable if, through over-anxiety or unnecessary punctiliousness, medical men failed to take their proper share in moral leadership along with the other great professions. Spiritual and moral problems deeply colour the "total condition" of the human personality, and it is the total condition that the profession of healing is committed to treat. In this connection Dr. Inge (1948). quoting from the writings of laymen, reminds us that our prophets to-day are not ministers of religion. This he says is characteristic of our time and he does not regret it.

New Horizons

Professor Crew's comprehensive definition has been referred to early in this paper. Public Health "includes within its province all that

pertains to man's well-being, taking into account not only the make-up of man himself but also his external world and his inter-relationship with it." But it will be asked, what is the nature of man and what is the nature of the world to which he is related? Though this cannot be pursued here a few words must be said.

The temper of thinking has changed very much in recent years. The scientist of to-day no longer says with Leibig (1803-73): "God has ordered all His Creation by Weight and Measure." The physicist was the confirmed mechanist of the nineteenth century but to-day men like Eddington and Jeans are using the language of the idealist philosopher; thinkers such as Inge, Whitehead and Smuts reinterpret the ancient wisdom. Dr. Inge writes: "Reality is neither mental nor material but a realm in which thought and thing, fact and value, are inseparable, neither having any existence apart from its correlative. The real world is a coherent organic unity, spaceless and timeless, but including all the happenings in space and time in their proper relations to itself —that is to say *sub specie æternitatis*. The attributes of ultimate reality are values." General Smuts remarked recently: "Our spiritual coinage is being debased; false currencies are in circulation which create worse than a black market. There is not only an economic crisis but a deeper social and spiritual crisis which is shaking the very foundations of our civilised life and thinking." Is all this nothing more than pious obscurantism? An illusion it may be, but Crichton-Miller has reminded us of the *value* of such an illusion. On the other hand, if the few words quoted from Inge and Smuts do indeed speak of eternal verities, there may be for medicine a new vision and promise.

Implications for Administration

It is not our purpose to give detailed suggestions for the future. Like the physician, the administrator will try to use wisely the resources already in his hands; he will apply the test of *values* to the various forms of local government and see that nothing of value is lost. The whole conception of "machinery" in the organisation of our health services must be rooted out.

In conclusion, considering it against a broad background, modern public health is still a very young child; it started life in the old Poor Law and it might almost be said that the child has been deprived of a normal home life. Nevertheless, the possibilities for maturity are enormous and we may hope that the new parents will be wiser and more understanding than the old. It is the laity, more than doctors, who hold the trust deeds of the future. But every doctor is working and will continue to work for a service which will become not only a comprehensive medical service but also the *health* service.

In accordance with University Regulations reference is made to historical material embodied in an unpublished M.D. Thesis, which has been used to a slight extent in this paper: "Some Principles of Health Education in Their Historical Relationships," Davies, H. S. 1946.

REFERENCES

Crichton-Miller, H. (1947): *Mental Hygiene,* Vol. 31, 1.
Greenwood, M. (1946): *B.M.J., 117,* 26/1/46.
Grundy, F. (1949): "New Public Health."
Hobson, W. (1949): *B.M.J., 546,* 3/9/49.
Inge, W. R. (1948): "Mysticism in Religion."
Jameson, W., and Parkinson, G. S. (1947): "Synopsis of Hygiene."
Simon, J. (1898): "English Sanitary Institutions."
Singer, C. (1928): "From Magic to Science."
Smuts, J. C. (1947): *R. Inst. Phil.,* addresses.
Whitehead, A. N. (1933): "Adventures of Ideas."

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